

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Amend the paragraph beginning on page 13, line 16, to read as follows:

The recipient may alter the relative phase difference between the reference and signals lights L and S. Then, these lights L and S are superimposed on the beam splitter 6. The two output lights from the beam splitter 6 then come incident on the photoconductor diodes 7a and 7b, respectively, for conversion into respective electric signals. Then, a difference between these signals is amplified and an output voltage is measured and taken as a signal difference by an ~~optical-balanced-homodyne~~ detector. For the amplifier, use is made of a charge sensitive amplifier a typical gain of which is 30 volts/pC (pico coulombs). Then, if the signal difference contains ten thousands (10,000) electrons the output voltage will have a magnitude of 50 mV.